

CLAIMS

1. ~~An adjustable wrench~~ for quickly adjusting the width of a jaw, comprising:
a stationary body (1), having a chamber (12) at an upper portion thereof;
and
a movable body (2), having a worm (13) at a lower portion thereof, being
movable transversely inside the chamber (12),
wherein the adjustable wrench further comprises:
a driving mechanism (100) located within the chamber (12), including
a worm gear (10) with a worm gear shaft (20), engaging the worm (13),
a first gear (3) mounted at an end of the worm gear shaft (20) of the worm
gear (10),
a connection shaft (9) located under the worm gear shaft (20) in parallel,
and
a second gear (4) mounted at an end of the connection shaft (9) to engage
with the first gear (3); and
a traction mechanism (200) connected to the connection shaft (9), wherein
the traction mechanism (200) drives the second gear (4) to rotate by driving the connection shaft
(9), which drives the first gear (3) to rotate, hereby rendering the worm (13) to move inside the
chamber (12).
2. The adjustable wrench of claim 1, wherein the driving mechanism (100)
further includes two joint flakes (15, 15') for integrating the worm gear and the driving
mechanism, circular holes (16, 17) and (16' 17') provided in a corresponding position of each of
the joint flakes (15, 15'), respectively, so that both ends of the worm gear shaft (20) and those of
the connection shaft (9) can be rotatably installed in the circular holes (16, 16') and (17, 17'),
respectively.

3. The adjustable wrench of claim 1, wherein the stationary body (1) includes an elongated cavity (11) positioned at a side of a handle (8) of the stationary body (1), and the traction mechanism (200) includes a guiding wheel (7) disposed within the elongated cavity (11) away from the chamber (12) and a driving rope (5) connected to the connection shaft (9) via the guiding wheel (7).

4. The adjustable wrench of claim 3, wherein the driving rope (5), with an end thereof, is tightly wound around the connection shaft (9) in a direction, and is tightly wound around the connection shaft (9) in an opposite direction with another end thereof, after wrapped around the guiding wheel (7).

5. The adjustable wrench of claim 4, wherein the driving rope (5) is made of materials with a high strength and slight flexibility.

6. The adjustable wrench of claim 4, wherein a control button (6) is provided at a section of the driving rope (5).

7. The adjustable wrench of claim 6, wherein the traction mechanism (200) further includes a cover plate (18) for covering the chamber (12) and the elongated cavity (11), having a shape corresponding to a peripheral shape of the chamber (12) and the elongated cavity (11), an elongated slot (19) is provided at the cover plate (18) for showing up the control button (6), and the cover plate (18) is secured at the stationary body (1) by a joint member.

8. The adjustable wrench of claim 7, wherein the joint member includes screw bores (21, 22) disposed at the cover plate (18) and the stationary body (1), respectively, and screws or bolts matched with the screw bores (21, 22).

9. The adjustable wrench of any one of claims 1-8, wherein a square through hole (14) is provided at the handle (8).